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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,363	01/26/2005	Christoph Pelchen	ZAHFRI P714US	1422
20210	7590	11/07/2006		
DAVIS & BUJOLD, P.L.L.C. 112 PLEASANT STREET CONCORD, NH 03301			EXAMINER HOLMES, JUSTIN K	
			ART UNIT	PAPER NUMBER
			3681	

DATE MAILED: 11/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/522,363	Applicant(s) PELCHEN ET AL.	
	Examiner Justin K. Holmes	Art Unit 3681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>1/26/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Examiner acknowledges receipt of the Oath and Declaration filed on January 26, 2005.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 14-26 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 14 recites the

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broad recitation "a vehicle", and the claim also recites "in particular an off-road vehicle" which is the narrower statement of the range/limitation.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 14-21 and 24-26 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,522,777 to Baxter et al.

The Baxter et al. patent teaches a method for controlling a drivetrain in a vehicle, in particular an off-road vehicle, with a drive engine 28, a multi-range transmission and a drive output, the multi-range transmission 26 consisting at least of an automatic transmission 26 and a downstream range transfer box 25 that can be shifted by means of shift elements 68, 96, when a transmission range of the range transfer box 25 is changed, a first shift element 68 of the range transfer box 25 that is to be engaged is synchronized by controlling shift elements of the automatic transmission 26, such that the range change in the range transfer box can be carried out automatically. See Figs. 1 and 2, and column 2, lines 7-13; column 5, lines 49-53. The terms shift elements of the automatic transmission as broadly recited in the claims is defined as the gear shifting on the automatic transmission. See column 5, lines 49-53. The transfer box is shifted automatically to avoid over revving of the engine 28. See column 5, lines 5-16 and lines 56-62.

Regarding claims 15 and 26, a change in the range transfer box 25 and the automatic transmission 26 is smaller than if the range of the transfer box alone had been changed. There is an instance when a change in the ratio of the automatic transmission is matched to the range change in the transfer box in such a manner that essentially no change occurs in the transmission ratio of the multi-range transmission. See the chart in column 7 and first gear high and third gear low.

Regarding claim 16 and 24, the range change takes place in the transfer box 25 in response to a voluntary driver command, namely, a shift button. See column 5, lines 65-57 and column 6, lines 1-5.

Regarding claim 17, before the range of the transfer box 25 is changed a load on the drive train is relieved by changing the torque of the drive engine 28. The engine speed can be decreased which in turn will decrease engine torque. See column 5, lines 35-47.

Regarding claim 18, the rotation speed of the drive engine 28 is changed toward a connection speed of a ratio to be produced in the multi range transmission, at which the shift element of the range transfer box 25 is synchronized. See column 2, lines 7-13; column 5, lines 35-62; and column 6, lines 30-37.

Regarding claim 19, the connection speed of the drive engine 28 is determined as a function of a transmission ratio to be engaged in the multi-range transmission 26 and of a vehicle speed, so that when the connection speed is reached an input speed on an engine side and an input speed of the shift element of the range transfer box 25

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to be engaged on an output side are equal. See column 2, lines 7-13; column 5, lines 35-62; and column 6, lines 30-37 and 46-53.

Regarding claims 20 and 21, the shift elements of the automatic transmission 26 are actuated in a manner as to adjust the connection speed of the drive engine 28. Further, the transmitting capability of the shift elements of the automatic transmission 26 is reduced in order to adjust the connection speed of the engine 18. The transmitting capability as broadly recited in the claims is defined as the shift elements being actuated during a gear shifting and that reducing is done during a gear shift. See column 5, lines 47-56 and column 6, lines 3-18 and lines 46-54.

Regarding claim 25, the change in ratio of the transfer box 25 and the automatic transmission 26 take place automatically when a defined operating condition exists, namely, the control module 110 does not allow the transfer box 25 or the automatic transmission 26 to shift unless an over revving situation is avoided. See column 5, lines 27-62.

Accordingly, all the elements of claims 14-21 and 24-26 are anticipated by the Baxter et al. patent.

Allowable Subject Matter

7. Claims 22 and 23 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent No. 5,588,935 to Osinski et al.; U.S. Publication No. 2002/0088291 to Bowen; U.S. Publication No. 2003/0228954 to Runde et al.; U.S. Publication No. 2004/0220007 to Pelchen et al.; U.S. Publication No. 2004/0220009 to Yu et al. all teach various transfer cases and control methods.

Facsimile Transmission

Submission of your response by facsimile transmission is encouraged. Group 3600's facsimile number is (571) 273-8300. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see MPEP 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check should not be submitting by facsimile transmission separately from the check.

Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP 512). The following is an example of the format the certification might take:

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Typed or printed name of person signing this certificate:

(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin K. Holmes whose telephone number is (571) 272-5930. The examiner can normally be reached on 8:00am to 4:30pm Monday-Friday.

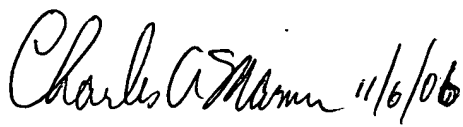
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on (571) 272-7095. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


JKH
11/4/06


CHARLES A. MAHMUD
SUPERVISORY PATENT EXAMINER
ART UNIT 3681